

WITH THE FARMERS

By Prof. W. F. MASSEY



Time and Soil for Fruit Trees.

"Please tell me when is the best time to plant fruit trees, and what kind of soil and situation is best for peaches and apples?" In all the warmer sections of the State, and in fact in the greater part of the State, the fall is the best time to plant any of our hardy fruits. In sections where the soil does not freeze deeply in winter, the trees will be making new feeding fibres and root hairs, and will be ready for the swelling of the buds in spring better than the spring-planted trees. Peaches like a lighter soil than apples, and should have a northern rather than a southern exposure. To prevent too early blooming in the spring, apples delight in a strong clay loam that is retentive of moisture. Not wet land, of course. The success of the pippin in our mountain coverts is largely due to the ever present moisture from springs on the mountain sides and the humus soil of the coverts that retains moisture better than the clay of the general valleys, and at the same time is well drained by the rocky debris that abounds in these coverts. A clay soil that is well supplied with organic decay suits apples very well, and a high and airy location. Mountain sides, not above the line of perennial springs, will be suitable for apples. Peaches will thrive on thinner soil than apples, but need regular cultivation every year till July, and then should have a winter cover of crimson clover, to be plowed under for the benefit of the trees in the spring. While the trees are young some crop like potatoes or muskmelons can be grown among the trees, but it is a mistake to plant corn in a young orchard either of peaches or apples. Peaches are often planted alternately with apple trees to occupy the land till the apple trees need all the room as the peach is naturally a short-lived tree, and can be removed when they crowd the apples. Planted in this way the apples are set forty feet apart and peaches between them.

Orchard Not Thirsty.

Fairfax County: "My orchard is in very poor clay soil and heavy in mud of humus. Last June I sowed peas in it, but they have not made a very good growth. Now I want to get a stand of crimson clover for a winter cover crop. When is the best time to sow this clover in this section, and is it necessary to inoculate the seeds? If so, where can I get the seed? In plowing and harrowing the orchard I find that the trees get some bad scars in spite of care. Would it be better to leave a wider strip next the trees, and if so, what is the best way to get the unplowed land in cultivation? The trees are four years old. How often and at what time would you advise spraying for apples and peaches? The peaches ought to bear next year." You do not say whether the peaches are in a separate orchard or are mixed in with the apples. If they are with the apples the clean soil should be carried on up to July every year so long as the peaches live. Apples I think do better by being put into grass after they have been well-cultivated and are coming into bearing. No cultivation should be done in an orchard after the middle of July, for by that time the wood growth of the season has been made, and the trees should be allowed to mature and ripen the wood and not be excited into a late growth. You can sow crimson clover now at any time in your locality up to the 1st of September. Sow fifteen pounds of seed an acre on well-prepared land. If the peaches are not heavy turn, then, under at once, and apply a dressing of lime at rate of 1,000 pounds of slaked lime an acre and harrow it in after the plowing. Then add 400 pounds of acid phosphate and twenty-five pounds of sulphate of potash an acre well harrowed in before sowing the clover seed. We spray both for fungus disease and insects. To prevent the San Jose scale spray with the lime-sulphur wash in fall after the leaves on the trees are off, and again in spring before the buds swell. In early spring spray the apple trees with Bordeaux mixture to prevent scab, and just as the blossoms appear spray again with forty pounds of lead arsenate mixed in fifty gallons of the Bordeaux to destroy the codling moth on the apples. This, of course, after the apple trees get to bearing. But the Bordeaux mixture should be used even on the young trees to keep the foliage in a healthy condition and to ward off leaf rust. If there are any cedar trees near the apples you had better destroy them, for the so-called apples on the cedar trees are the winter home of the fungus that causes the rust on the apples. In summer, and you cannot keep apples in healthy condition if there are cedar trees near by. Annual fertilization and the growing of a winter cover crop to turn under in the spring are important in the development of clover will give you the best results. Acid and good applications of phosphoric acid and potash will not only help make the clover and peas, but will tend to fruitfulness in the trees and early bearing. You can get a culture for inoculating the seed from H. C. Mulford, Philadelphia, Pa.

Harvesting Peas.

"I notice that you say that the Key-stone pea harvester will gather, thresh and clean peas from the rows in your page in another paper. Must the peas be perfectly mature for the machine? Of course, the peas must all be ripe and usually with all the leaves gone. The harvester is all the machine for gathering the peas, and no hay is made, but the vines and hulls all go back to the soil for its improvement. There is another machine made in Tennessee that is used to thresh the ripe peas from the curved rows. This is also a good machine, and I want to Tennessee to see it work. The trouble in threshing peas with a wheat thrasher is that it not only breaks the peas badly, but the vines wrap around the cylinder and choke it. In the machine I mention the vines are first cut by the machine into pieces about four or five inches long, putting the hay in good shape for feeding, and then the peas are threshed out by wide-set teeth and are not broken. I have seen both the harvester and the thrasher work, and did not indorse either till after I had done so. One is a harvester and the other a thrasher, used after the

hay is cured. These are the only two machines I know of that will clean out the peas rapidly and easily. But to use the harvester the peas must be in rows about three feet apart and must stand till dead ripe. The machine is drawn by a pair of mules easily. Send a stamped and addressed envelope, and I will tell you where to get either.

Liberalty to the Agricultural Colleges. The Pennsylvania Legislature has set a good example to Virginia. They have given the State College near a million and a half dollars, which the Governor was obliged to cut down to \$1,225,000. But that looks great when compared with what the Virginia college gets from the State. North Carolina is more liberal with her college than Virginia is with hers, and the North Carolina College, where I was one of the first faculty, and started only in 1889 with a single building, has now an array of fine buildings that throw the Virginia Polytechnic Institute into the shade. North Carolina College, too, has been fortunate in the fact that every president has been backed by the farmers and by a united faculty, while for years the Virginia college has been the seat of contentions within and without. It is to be hoped that the new president will have a better support, and more liberal treatment by the Legislature. In New Jersey the college has a farm that is said to return a profit of \$25,000 a year to the State. Whether a college farm run for profit is as valuable as a means for instruction or not is a question. But if the students can be taught business-like farming for profit, it may be well to run the farm in that way. But I have always been of the opinion that the college farm, being the laboratory of the agricultural department, should have instruction as its main object, rather than the making of a profit. If both can be done, all right, but I doubt it.

Feeding Ensilage to Bees.

Some very interesting experiments have been made at the Missouri Station in feeding ensilage to beef cattle. They found that a ton of ensilage was approximately equal in feeding value to half a ton of red clover hay. Estimated on the basis of net profit per steer, a ton of dry matter in the form of corn ensilage, yielded 50.3 per cent greater value than a ton of dry matter in the form of shock corn. The addition of clover hay to silage was an advantage, and it was evidence that it takes less grain in the form of silage to fatten two-year-old steers when silage forms a part of the ration. And there was a superior finish in the cattle.

"What amount per acre is the best seeding for winter oats?" It is rather hard to answer this question. Heavier seed is better on thin soil than on fertile, since the growth will be less strong and tillering smaller. But as a rule I am inclined to think that most of our farmers sow too few oats an acre. Of course, something depends on the time of sowing. A rather thin sowing early in September may do as well as a thicker sowing later in the fall. I have sown oats in various amounts, from two to a half bushels an acre. Where the soil is fairly good or the crop is well fertilized I think that two and a half bushels an acre in September is rather too heavy sowing. The best crop I remember was made from sowing nine pecks of oats, winter oats, in February. I have found that in our climate the Virginia winter oats are best even for spring sowing. I have never sown such a large amount when sowing in the early fall, and as a rule, I believe that two bushels an acre sown in early September on well-fertilized and prepared land will be fair seedling of winter oats. If not practicable to get them in early, and the drilling is deferred till October, I would increase the amount to eight pecks an acre. Then I have also found that the crop will succeed far better drilled in like wheat than sown broadcast as many do.

Then, if you sow absolutely clean seed you may be sure there will be no cheat in the crop. The seed of cheat, *bromus secalinus*, looks very much like a small oat, and many assume that they have turned to cheat simply because they have sown a lot of cheat seed, and the winter has been hard on the oats, while the hardy cheat has flourished. Oats never turn to cheat or any other grass but oats, and whatsoever you sow that also you will reap. Good use of the fanning mill to blow out the light cheat seed and the light oats will greatly increase the prospect for a good crop.

Preparing for Small Grain.

One of the chief reasons for winter killing is the lack of proper preparation of the soil either for wheat or oats. Oats roughly put in broadcast are roughly plowed land will be far more apt to be winter-killed than if the land is prepared early and well-fined before sowing the seed. Winter small grain demands a well-settled soil, and the surface made fine by repeated harrowings and tramping by teams. Where the crop comes in after corn it is a mistake to plow the land. It is far better to let the plowing be done the corn remain settled, and merely fine the surface three inches, making that as fine as practicable with disk and spike harrow.

Mr. Maryland, best crop ever made of wheat burials an acre, was a half bushel of land plowed in May to destroy a weed, and kept harrowed continually all summer and then drilled with wheat when there was only dust enough on the surface to cover the grain. The cultivation of a corn crop will answer for as well as such a long bare fallow, and where the corn is grown on a clover seed with the home made manure, it will be in the best possible condition for fall grain if the spring plowing is not disturbed, but the surface, after cutting the corn is made as fine as practicable, and the more the harrow goes over the land the better the chances for the crop when the corn is sown. The cultivation of the corn has made the summer fallow far more profitable than keeping land bare to the sun all summer.

The best wheat growers have very largely abandoned the old practice of a summer fallow, as too costly a way to grow wheat. It is far better to get a good crop of corn or tobacco on the land in preparation for the winter grain.

I have noticed in the fine county of Lancaster, Pa., called the banner county of this country for fine farming, that they prepare the land after tobacco for wheat so lightly that when the wheat is germinating one can see the rows of tobacco stalks still standing, but the surface of the soil is made very fine, and so shallow that the tobacco stubs are not turned at all. And there is no country where finer crops of wheat are made than in Lancaster. A well-settled soil is essential to good wheat and oats growth.

SUPREME COURT BEGINS FALL TERM

First Day Given Up to Examination of Applicants for License to Practice Law.

WILL ANNOUNCE LIST LATER

War Declared Between Book Dealers and Management of Public Schools.

[Special to The Times-Dispatch.] Raleigh, N. C., August 26.—The North Carolina Supreme Court convened for the fall term to-day with all five of the justices on hand, and took up at once the examination of applicants for license to practice law in this State, the first day of the court being devoted to this work. There were seventy-six applicants for licenses who undertook the examinations. Three of them are negroes. One young woman was expected to be here for the examination, but decided to wait for the opening of the spring term in February. The list of the successful applicants will be announced the latter part of the week. The argument of appeals from the First District will be called Tuesday morning.

The Realty Improvement Corporation, of Charlotte, is chartered with \$75,000 capital authorized and \$7,500 subscribed by J. F. Flowers, J. L. Jones, C. A. Springs and others for real estate development, also the Quaker Laboratory, Wilmington, capital \$100,000 authorized and \$1,000 subscribed by W. P. Edmundson, C. H. Ziblin, G. S. McDaniel and others for manufacture of a line of family medicines. There was an amendment for the charter of the Smith Manufacturing Co., of Durham, whereby the company adds \$11,500 6 per cent preferred stock and makes the capital stock \$50,000.

Governor Craig honored a requisition to-day from the Governor of Missouri for J. F. Long, who is wanted in Jefferson County, that State, for embezzlement. Long is a lawyer and is in Charlotte. He has indicated that he will not resist the movement for extradition.

A war is declared between the book dealers of Raleigh and the management of the Raleigh public schools, and some of the book publishers are taking sides with the dealers to force the school authorities to negotiate with the dealers for whatever books they purchase. The trouble has grown out of a plan on the part of the school management to rent books and other school supplies to the children. The proposition of the schools is to rent from the first to the fourth grades.

Now the dealers come out in flaming announcements that they will sell the new books and supplies, the same that the school authorities will furnish for \$1.50 for the first grade; \$1.12 for the second; \$2.63 for the third, and \$3.17 for the fourth grade, and then the books will be left in the family for the younger children, or they can be sold back to dealers for half price, thus assuring a great saving to the parents in final cost of books. This is the first year that the school management has undertaken to conduct a rental department for books, and the experiment is being watched with keen interest and varying degrees of commendation and criticism. Parents can rent the books from the school authorities or purchase them from dealers as they please.

The summer series of farmers' institutes by the State Department of Agriculture closed to-day, after a most successful series that started July 25, there having been 153 each of institutes for men and for women. Another series is being arranged to begin early in September, to be held in Caldwell, Ashe, Alleghany and Watauga Counties. The attendance for the series just closed was very good, the largest on record, in fact, for the institutes for the farmers' wives and daughters. Captain T. B. Parker, director of the farmers' institute division, says the crop conditions where the institute workers have been are very good. The corn crop will be a record-breaker. Cotton is very good, and crops generally a much higher average than usual. The farmers are in fine spirits and bent on the improvement of farming methods.

SORDID, BAD EXAMPLE

Evelyn Thaw Should Not Be Permitted to Pose as Heroine.

[Special to The Times-Dispatch.] Washington, August 25.—Mrs. William A. Cullon, wife of Representative Cullon, of Indiana, and president of the Woman's National Democratic League, said yesterday that the attitude of Evelyn Thaw as a heroine was a bad example to American girlhood, for whom she should be a frightful warning.

"The managers of Evelyn Thaw are capitalizing the publicity given her husband," said Mrs. Cullon. "Her press agents are in high glee and using her husband's exploits to turn the public to the box office. This should not be done for the sake of young America, the public should boycott her performances. Her success is greatly to the detriment of girls who witness it and do not see the darker, sordid side to the picture. Better that the American girl be without a heroine than she make one of Evelyn Thaw, who, though she may be misguided and unfortunate, is certainly not the criterion for a young girl."

CHAOTIC CONDITIONS.

Government Troops in Yang Tse Valley Employ Dilatory Tactics.

London, August 25.—The Peking correspondent of the Times describes chaotic conditions in the Yang Tse Valley, owing to dilatory tactics of government troops. He says that within a day's march of the Wu Sung Ferry, 2,000 southerners continue to defy the victors, and the attitude of the Kiang Yin forces is so doubtful that the warships which are badly wanted for an assault on Nanking, dare not venture past them.

Nanking is still resisting the attack by three government armies, and in other districts "the general flabbiness" of the provisional administration encourages the isolated risings against authority. The power of the purse, adds the correspondent, has been allowed to supplant the power of the sword, and, conducted on the present lines, the war can last forever.

A Shanghai dispatch to the Times, contrary to the Peking dispatch, asserts that five cruisers passed Ching Kiang, proceeding up stream Saturday, proving that the Kiang-Yin forts are loyal.

Try Ten Times For The \$300 Cash

According to the rules of the Booklovers' Contest Game, from one to ten different answers may be made to each picture. If you have an Answer Book and make the limit of ten answers to each picture, you will need only one copy of each picture. Will your chances of naming the correct title be greater if you make TEN answers, or ONE answer, to each picture?

Ten of the Correct Titles Are Marked for You in the Catalogue

You will find in the catalogue ten titles marked with a STAR. So if you have a catalogue you will find ten of the titles marked for you. This leaves you but 67 titles to find for yourself.

The catalogue contains all of the 77 correct titles, but ten of the correct titles are marked for you with a star. With the catalogue you get pictures Nos. 1 to 35 FREE.

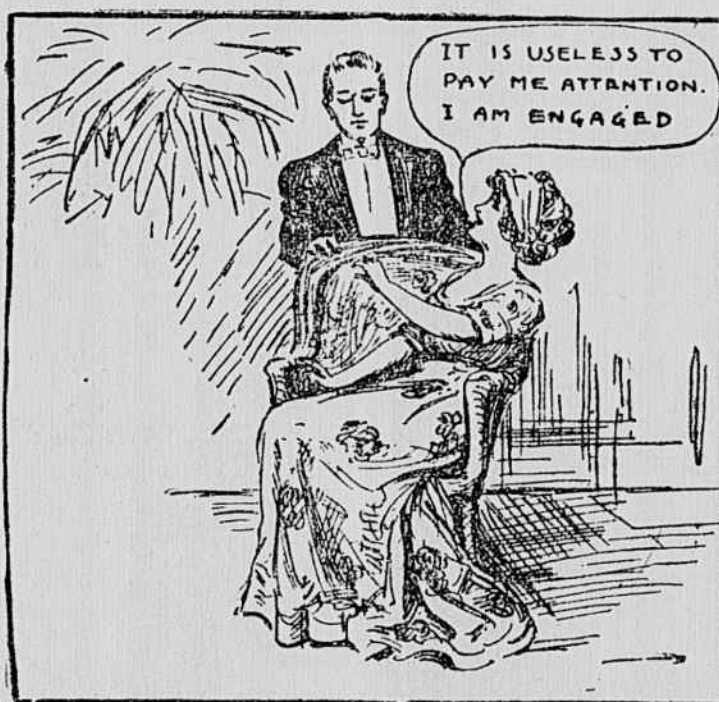
Suppose a picture represents a man who is standing in the window of a top floor of a burning building. Well, if you have a catalogue you can easily pick out its title. "In Peril of His Life" or "Facing Death," etc. Use your ingenuity in picking out what sort of titles that picture might represent. Then look in your catalogue to see if such titles are listed there. If you do not find one of your possible titles in the catalogue then you can be sure that the title is not correct.

For all the correct titles are in the catalogue. With the catalogue and your own common sense you will have no trouble in solving the 77 pictures, and remember the catalogue contains ten of the titles marked for you with a star, so you really only have 67 pictures to tell the titles to.

Get your catalogue and the free pictures to-day and win your share of those wonderful prizes. You can win, and easily, too.

The Times-Dispatch's Great \$1200.00 Gold Booklovers' Contest

Picture No. 31 Date, August 26th



What Book Does This Picture Represent? Write Title and Name of Author in Form Below

Title
Author
Your Name
Street and Number

City or Town
TOTAL NUMBER OF PICTURES, 77. Contest began July 27th. Each day a different picture appears in this space. Cut them out. Save them up in the last picture appears on October 11th. Don't send in partial lists. Wait until you have all the answers to the 77. Read Rules, Daily Story and Special Announcements in another part of this paper. It will help you win a prize. Extra pictures and coupons of any date that have appeared may be had at 2c. Enter to-day without registering your name. Merely Save Pictures and Coupons as they appear.

ENTER THIS CONTEST TO-DAY.

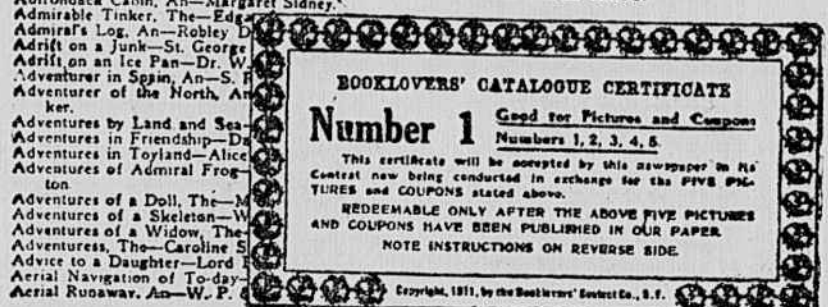
You can enter contest at any time. Order the paper sent you for three months beginning with issue of day your order is received. Get in the contest right now. It is just becoming interesting. Don't miss a single picture. Get this paper every day.

SUBSCRIPTION RATES.

Daily and Sunday by carrier, 65c a month.
Daily and Sunday by mail for three months, \$1.50.
Price of paper per single copy: Daily, 2c. Sunday, 5c.

CONTEST EDITOR'S ::::OFFICIAL:::: Booklovers' Catalogue

Here is a portion of one of the pages of the Catalogue, showing how the titles are listed in alphabetical order. One of the catalogue certificates, redeemable for five free pictures, is shown also. The 77 titles which the 77 pictures represent are contained in this catalogue, and YOU can find them there.



USE THIS ORDER BLANK FOR CATALOGUE
If you cut this order form, fill it out and send or bring it in with the sum designated, you will receive the Official Copyrighted Contest Catalogue of about 5,000 book titles, and seven certificates redeemable for the first thirty-five pictures in the contest. In the catalogue are all the correct titles to the seventy-seven pictures. Catalogues, 35 cents at this office, 40 cents by mail.

Do Not Send Stamps or Silver. Send Check or Money Order.

Booklovers' Contest Editor, The Times-Dispatch:
Inclosed find 40 cents, for which send me a Booklovers' Contest Catalogue of about 5,000 book titles and the seven certificates redeemable for the first thirty-five pictures.
Name
Street and No.
City State

BEWARE OF FAKERS Who Offer to Sell Worthless List of Titles---They Cannot Help You

How They Work
These fakers generally advertise that for a 2-cent stamp they will send several titles, which, in the opinion of the fakers, will prove correct titles to the pictures. Accompanying the "sample" lists of titles will be a letter advising that for 50 cents, a dollar, two dollars, or more, they will supply lists of titles that will seem to fit the pictures. Don't deal with these sharpers. If they could furnish a list of titles, they would solve the pictures—they would use their own lists and win the prizes. They know no more about the titles than you do.

The principal features in connection with this contest are copyrighted by the Booklovers' Contest Co., San Francisco, Cal.